

0590  
1028

#10



OICE

ENTERED

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002

TIME: 14:56:03

Input Set : A:\108236-130.ST25.txt

Output Set: N:\CRF4\11062002\J083936B.raw

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4 <110> APPLICANT: Moore, Jeffrey G.
6 <120> TITLE OF INVENTION: Compositions and Methods for Protecting Tissues and
7   Cells from Damage, and for Repairing Damaged Tissues
9 <130> FILE REFERENCE: 108236.130
11 <140> CURRENT APPLICATION NUMBER: US 10/083,936B
C--> 12 <141> CURRENT FILING DATE: 2002-10-22
14 <150> PRIOR APPLICATION NUMBER: US 60/271,666
15 <151> PRIOR FILING DATE: 2001-02-27
17 <150> PRIOR APPLICATION NUMBER: US 60/302,716
18 <151> PRIOR FILING DATE: 2001-07-03
20 <160> NUMBER OF SEQ ID NOS: 10
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 939
26 <212> TYPE: DNA
27 <213> ORGANISM: Dolichos lablab
29 <400> SEQUENCE: 1
30 gcacagtcacat tgtcatttag tttcaccaag tttgatccta accaagagga tcttatcttc 60
31 caagggtcatg ccaacttctac aaacaatgtc ttacaagtca ccaagttaga cagtgcagga 120
32 aaccctgtga gttctagtgc gggaagagtg ttatatcttg caccattgag cctttgggaa 180
33 gactctgcgg tattgacaag ctttgacacc attatcaact ttgaaatctc aacaccttac 240
34 acttctcgta tagctgatgg cttggccttc ttcattgcac cacctgactc tgtcatcagt 300
35 tatcatgggtg gttttcttgg actctttccc aacgcaaaca ctctcaaca ctcttccacc 360
36 tctgaaaacc aaaccaccac taaggctgca tcaagcaacg ttgttgctgt tgaatttgac 420
37 acctatctta atcccgatta tggatgacca aactacatac acatcggaat tgacgtcaac 480
38 tctattagat ccaaggtaac tgctaagtgg gactggcaaa atgggaaaat agccactgca 540
39 cacattagct ataactctgt ctctaaaaga ctatctgtta ctagttatta tgctgggagt 600
40 aaacctgcga ctctctccta tgatattgag ttacatacag tgcttctga atgggtcaga 660
41 gtagggttat ctgcttcaac tggacaagat aaagaaagaa ataccgttca ctcatggtct 720
42 ttcacttcaa gcttgtggac caatgtggcg aagaaggaga atgaaaaca gtatattaca 780
43 agaggcgctt tgtgatgata tatgtgtatc aatgattttc tatgttataa gcatgtaatg 840
44 tgcgatgagt caataatcac aagtacagtg tagtacttgt atgttggttg tgtaagagtc 900
45 agtttgcttt taataataac aagtgcagtt agtacttgt 939
48 <210> SEQ ID NO: 2
49 <211> LENGTH: 264
50 <212> TYPE: PRT
51 <213> ORGANISM: Dolichos lablab
53 <400> SEQUENCE: 2
54 Ala Gln Ser Leu Ser Phe Ser Phe Thr Lys Phe Asp Pro Asn Gln Glu
55 1 5 10 15
57 Asp Leu Ile Phe Gln Gly His Ala Thr Ser Thr Asn Asn Val Leu Gln
58 20 25 30
60 Val Thr Lys Leu Asp Ser Ala Gly Asn Pro Val Ser Ser Ser Ala Gly

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61          35          40          45
63 Arg Val Leu Tyr Ser Ala Pro Leu Arg Leu Trp Glu Asp Ser Ala Val
64          50          55          60
66 Leu Thr Ser Phe Asp Thr Ile Ile Asn Phe Glu Ile Ser Thr Pro Tyr
67 65          70          75          80
69 Thr Ser Arg Ile Ala Asp Gly Leu Ala Phe Phe Ile Ala Pro Pro Asp
70          85          90          95
72 Ser Val Ile Ser Tyr His Gly Gly Phe Leu Gly Leu Phe Pro Asn Ala
73          100          105          110
75 Asn Thr Leu Asn Asn Ser Ser Thr Ser Glu Asn Gln Thr Thr Thr Lys
76          115          120          125
78 Ala Ala Ser Ser Asn Val Val Ala Val Glu Phe Asp Thr Tyr Leu Asn
79          130          135          140
81 Pro Asp Tyr Gly Asp Pro Asn Tyr Ile His Ile Gly Ile Asp Val Asn
82 145          150          155          160
84 Ser Ile Arg Ser Lys Val Thr Ala Lys Trp Asp Trp Gln Asn Gly Lys
85          165          170          175
87 Ile Ala Thr Ala His Ile Ser Tyr Asn Ser Val Ser Lys Arg Leu Ser
88          180          185          190
90 Val Thr Ser Tyr Tyr Ala Gly Ser Lys Pro Ala Thr Leu Ser Tyr Asp
91          195          200          205
93 Ile Glu Leu His Thr Val Leu Pro Glu Trp Val Arg Val Gly Leu Ser
94          210          215          220
96 Ala Ser Thr Gly Gln Asp Lys Glu Arg Asn Thr Val His Ser Trp Ser
97 225          230          235          240
99 Phe Thr Ser Ser Leu Trp Thr Asn Val Ala Lys Lys Glu Asn Glu Asn
100          245          250          255
102 Lys Tyr Ile Thr Arg Gly Val Leu
103          260
106 <210> SEQ ID NO: 3
107 <211> LENGTH: 1005
108 <212> TYPE: DNA
109 <213> ORGANISM: Dolichos lablab
111 <400> SEQUENCE: 3
112 atggcttcct ccaacttact caccctagcc ctcttccttg tgctttctcac ccacgcaaac 60
113 tcagccgcac agtcattgtc atttagtttc accaagtgtg atcctaacca agaggatctt 120
114 atcttccaag gtcattgccac ttctacaaac aatgtcttac aagtcaccaa gttagacagt 180
115 gcaggaaacc ctgtgagttc tagtgcggga agagtgttat attctgcacc attgcgcctt 240
116 tgggaagact ctgcggtatt gacaagcttt gacaccatta tcaactttga aatctcaaca 300
117 cttacactt ctcgtatagc tgatggcttg gccttcttca ttgcaccacc tgactctgtc 360
118 atcagttatc atggtggttt tcttggtgact tttcccaacg caaacactct caacaactct 420
119 tccacctctg aaaaccaaac caccactaag gctgcatcaa gcaacgttgt tgctgttgaa 480
120 tttgacacct atcttaatcc cgattatggt gatccaaact acatacacat cggaattgac 540
121 gtcaactcta ttagatccaa ggtaactgct aagtgggact ggcaaaatgg gaaaatagcc 600
122 actgcacaca ttagctataa ctctgtctct aaaagactat ctgttactag ttattatgct 660
123 gggagttaac ctgcgactct ctcttatgat attgagttac atacagtgtc tcctgaatgg 720
124 gtcagagtag ggttatctgc ttcaactgga caagataaag aaagaaatac cgttcactca 780
125 tggcttttca cttcaagctt gtggaccaat gtggcgaaag aggagaatga aaacaagtat 840
126 attacaagag gcgttctgtg atgatatatg tgtatcaatg attttctatg ttataagcat 900

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127 gtaatgtgcg atgagtcaat aatcacaagt acagtgtagt acttgatatgt tgtttgtgta 960
128 agagtcagtt tgcttttaaat aataacaagt gcagtttagta cttgt 1005
131 <210> SEQ ID NO: 4
132 <211> LENGTH: 22
133 <212> TYPE: PRT
134 <213> ORGANISM: Dolichos lablab
136 <400> SEQUENCE: 4
137 Met Ala Ser Ser Asn Leu Leu Thr Leu Ala Leu Phe Leu Val Leu Leu
138 1 5 10 15
140 Thr His Ala Asn Ser Ala
141 20
144 <210> SEQ ID NO: 5
145 <211> LENGTH: 914
146 <212> TYPE: DNA
147 <213> ORGANISM: Phaseolus vulgaris
149 <400> SEQUENCE: 5
150 gctcagtcatt tatcttttaa ctttaccaag tttgatcttg accaaaaaga tcttatcttc 60
151 caaggtgatg ccacttctac aaacaatgtc ttacaactca ctaagttaga cagtggagga 120
152 aaccctgtgg gtgctagtgt gggaagagtg ttattctctg caccatttca tctttgggaa 180
153 aactctatgg cagtgtcaag ctttgaaact aatctcacca ttcaaatctc aacacctcac 240
154 ccttattatg cagctgatgg ctttgccttc ttcttgacac cacatgacac tgtcatccct 300
155 ccaaattctt ggggcaaatt ccttggactc tactcaaagc ttttcagaaa ctccccacc 360
156 tctgaaaacc aaagcttttg tgatgtcaat actgactcaa gagttgttg tgtcgaattt 420
157 gacaccttcc ctaatgccaa tattgatcca aattacagac acattggaat cgatgtgaac 480
158 tctattaagt ccaaggaaac tgctaggtgg gagtggcaaa atgggaaaac ggccactgca 540
159 cgcacagctc ataactctgc ctctaaaaaa tcaactgtta ctacgtttta tcttgggatg 600
160 gaagttgtgg ctctctccca tgatgttgac ttacatgcag agcttcctga atgggttaga 660
161 gtagggttat ctgcttcaac tggagaggag aaacaaaaaa ataccattat ctcattgtct 720
162 ttcacttcaa gcttgaagaa caacgaggtg aaggagccga aagaagacat gtataattgca 780
163 aacgttgtgc gatcatatac atggatcaat gacgttctat cttatataag caataaataa 840
164 atgtatgatg cactcaataa taatcacaag tacgtacggt gtagtacttg tatgttgttt 900
165 atgaaaaaaa aaaa 914
168 <210> SEQ ID NO: 6
169 <211> LENGTH: 303
170 <212> TYPE: PRT
171 <213> ORGANISM: Phaseolus vulgaris
173 <400> SEQUENCE: 6
174 Ala Gln Ser Leu Ser Phe Asn Phe Thr Lys Phe Asp Leu Asp Gln Lys
175 1 5 10 15
176 Asp Leu Ile Phe Gln Gly Asp Ala Thr Ser Thr Asn Asn Val Leu Gln
177 20 25 30
178 Leu Thr Lys Leu Asp Ser Gly Gly Asn Pro Val Gly Ala Ser Val Gly
179 35 40 45
180 Arg Val Leu Phe Ser Ala Pro Phe His Leu Trp Glu Asn Ser Met Ala
181 50 55 60
182 Val Ser Ser Phe Glu Thr Asn Leu Thr Ile Gln Ile Ser Thr Pro His
183 65 70 75 80
184 Pro Tyr Tyr Ala Ala Asp Gly Phe Ala Phe Phe Leu Ala Pro His Asp
185 85 90 95

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Input Set : A:\108236-130.ST25.txt

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186 Thr Val Ile Pro Pro Asn Ser Trp Gly Lys Phe Leu Gly Leu Tyr Ser
187      100      105      110
188 Asn Val Phe Arg Asn Ser Pro Thr Ser Glu Asn Gln Ser Phe Gly Asp
189      115      120      125
190 Val Asn Thr Asp Ser Arg Val Val Ala Val Glu Phe Asp Thr Phe Pro
191      130      135      140
192 Asn Ala Asn Ile Asp Pro Asn Tyr Arg His Ile Gly Ile Asp Val Asn
193 145      150      155      160
194 Ser Ile Lys Ser Lys Glu Thr Ala Arg Trp Glu Trp Gln Asn Gly Lys
195      165      170      175
196 Thr Ala Thr Ala Arg Ile Ser Tyr Asn Ser Ala Ser Lys Lys Ser Thr
197      180      185      190
198 Val Thr Thr Phe Tyr Pro Gly Met Glu Val Val Ala Leu Ser His Asp
199      195      200      205
200 Val Asp Leu His Ala Glu Leu Pro Glu Trp Val Arg Val Gly Leu Ser
201      210      215      220
202 Ala Ser Thr Gly Glu Glu Lys Gln Lys Asn Thr Ile Ile Ser Trp Ser
203 225      230      235      240
204 Phe Thr Ser Ser Leu Lys Asn Asn Glu Val Lys Glu Pro Lys Glu Asp
205      245      250      255
206 Met Tyr Ile Ala Asn Val Val Arg Ser Tyr Thr Trp Ile Asn Asp Val
207      260      265      270
208 Leu Ser Tyr Ile Ser Asn Lys Met Tyr Asp Ala Leu Asn Asn Asn His
209      275      280      285
210 Lys Tyr Val Arg Cys Ser Thr Cys Met Leu Phe Met Lys Lys Lys
211      290      295      300

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214 &lt;210&gt; SEQ ID NO: 7

215 &lt;211&gt; LENGTH: 678

216 &lt;212&gt; TYPE: DNA

217 <213> ORGANISM: *Sphenostylis stenocarpa*

219 &lt;400&gt; SEQUENCE: 7

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220 acgaagttcg acagcgacca aaaggatctt atgttccaag gtcataccat ttctagcagc 60
221 aatgtcatat aactcaccaa gttagacagt aatggaaacc ctgtgagtag cagtgtggga 120
222 agagtgttat actctgcacc attgcgcctt tgggaaagct ctacagtagt gtcaaccttt 180
223 gagaccactt tcacctttca aatctcaaca cttacacta gtcctcctgg tgatgggctc 240
224 gcctttcttc ttgcaccata tgacactgtc atccctccaa attctgctgg caatcttctt 300
225 ggactctttc ctaacttaaa tgctttaaga aactccacca ccagtaaaga aaccactatt 360
226 gatgtcaatg ctgcatctaa caacgttggt gccgttgaat ttgacaccta ccctaacgac 420
227 aatattggtg atccaagata caaacacatt ggaatcgatg tcaactctat caggtccaag 480
228 gcaactgttg cgtgggactg gcaaaatggg aaaacagcca ctgcacacat cagctataac 540
229 tctgcctcta aaagactatc tgttactact ttttatcctg ggggtaaagc tgtgagtctt 600
230 tcccatgacg ttgagctcac tcaagtgtct cctcaatgga ttagagtagg gttctctgct 660
231 tcaacaggat tagagaaa
232
233
234 <210> SEQ ID NO: 8
235 <211> LENGTH: 234
236 <212> TYPE: PRT
237 <213> ORGANISM: Sphenostylis stenocarpa
239 <400> SEQUENCE: 8
240 Ala Gln Ser Val Ser Phe Thr Phe Thr Lys Phe Asp Ser Asp Gln Lys

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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002  
 TIME: 14:56:03

Input Set : A:\108236-130.ST25.txt  
 Output Set: N:\CRF4\11062002\J083936B.raw

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241      1              5              10              15
243 Asp Leu Met Phe Gln Gly His Thr Ile Ser Ser Ser Asn Val Ile Gln
244              20              25              30
246 Leu Thr Lys Leu Asp Ser Asn Gly Asn Pro Val Ser Thr Ser Val Gly
247              35              40              45
249 Arg Val Leu Tyr Ser Ala Pro Leu Arg Leu Trp Glu Ser Ser Thr Val
250              50              55              60
252 Val Ser Thr Phe Glu Thr Thr Phe Thr Phe Gln Ile Ser Thr Pro Tyr
253 65              70              75              80
255 Thr Ser Pro Pro Gly Asp Gly Leu Ala Phe Phe Leu Ala Pro Tyr Asp
256              85              90              95
258 Thr Val Ile Pro Pro Asn Ser Ala Gly Asn Leu Leu Gly Leu Phe Pro
259              100              105              110
261 Asn Leu Asn Ala Leu Arg Asn Ser Thr Thr Ser Lys Glu Thr Thr Ile
262              115              120              125
264 Asp Val Asn Ala Ala Ser Asn Asn Val Val Ala Val Glu Phe Asp Thr
265              130              135              140
267 Tyr Pro Asn Asp Asn Ile Gly Asp Pro Arg Tyr Lys His Ile Gly Ile
268 145              150              155              160
270 Asp Val Asn Ser Ile Arg Ser Lys Ala Thr Val Ala Trp Asp Trp Gln
271              165              170              175
273 Asn Gly Lys Thr Ala Thr Ala His Ile Ser Tyr Asn Ser Ala Ser Lys
274              180              185              190
276 Arg Leu Ser Val Thr Thr Phe Tyr Pro Gly Gly Lys Ala Val Ser Leu
277              195              200              205
279 Ser His Asp Val Glu Leu Thr Gln Val Leu Pro Gln Trp Ile Arg Val
280              210              215              220
282 Gly Phe Ser Ala Ser Thr Gly Leu Glu Lys
283 225              230

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286 <210> SEQ ID NO: 9

287 <211> LENGTH: 15

288 <212> TYPE: PRT

289 <213> ORGANISM: Sphenostylis stenocarpa

291 <400> SEQUENCE: 9

292 Ala Gln Ser Val Ser Phe Thr Phe Thr Lys Phe Asp Ser Asp Gln

293 1 5 10 15

295 <210> SEQ ID NO: 10

296 <211> LENGTH: 16

297 <212> TYPE: PRT

298 <213> ORGANISM: Sphenostylis stenocarpa

300 <220> FEATURE:

301 <221> NAME/KEY: VARIANT

302 <222> LOCATION: 14

303 <223> OTHER INFORMATION: Xaa = Any Amino Acid

305 <400> SEQUENCE: 10

W--> 306 Ala Ala Ser Asn Asn Val Val Ala Val Glu Phe Asp Thr Xaa Pro Asn  
 307 1 5 10 15

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002  
TIME: 14:56:05

Input Set : A:\108236-130.ST25.txt  
Output Set: N:\CRF4\11062002\J083936B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 14

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/083,936B

DATE: 11/06/2002

TIME: 14:56:05

Input Set : A:\108236-130.ST25.txt

Output Set: N:\CRF4\11062002\J083936B.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:306 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0